

AMENDMENTS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Claims 1-23 (Canceled)

24. (Currently Amended) A system for implanting a conduit with at least one side-branch in a vessel, comprising:

a main member comprising a wall having an opening;

at least one side-branch member integrally connected at a proximal end to the main member at the opening, wherein the at least one side-branch member is configured to be extended from within the main member through the opening; and

a delivery system engaging at least one of the main member and the at least one side-branch member for implanting the main member and the at least one side-branch member in the vessel.

25. (Original) The system of claim 24, wherein the delivery system includes:

a main guidewire configured to be inserted into the vessel; and

a side-branch guidewire configured to be inserted into a side-branch of the vessel.

26. (Original) The system of claim 25, wherein the delivery system further comprises:

a main balloon catheter releasably attachable to the main member and slidably attachable to the main guidewire; and

a side-branch balloon catheter releasably attachable to the at least one side-branch member and slidably attachable to the side-branch guidewire.

27. (Original) The system of claim 24, wherein the delivery system includes a deployment tube configured to engage the at least one side-branch member.

28. (Original) The system of claim 24, wherein the delivery system includes at least one sheath configured to retain at least one of the main member and the at least one side-branch member.

29. (Original) The system of claim 28, wherein the delivery system further includes a push element configured to engage at least one of the main member and the at least one side-branch member and move the at least one of the main member and the at least one side-branch member with respect to the sheath.

30. (Original) The system of claim 28, wherein the sheath has an aperture defined through a wall of the sheath, and the sheath aperture is aligned with the main member opening.

31. (Original) The system of claim 30, wherein the delivery system further comprises:

a guidewire inserted into a side-branch of the vessel through the sheath aperture and the main member opening; and

a balloon catheter adapted to be releasably attached to an end of the at least one-side branch member and advanced over the guidewire.

32. (Original) The system of claim 24, wherein the delivery system includes at least one guidewire adapted to be inserted into a vessel.

33. (Original) The system of claim 24, further comprising a deployment tube configured to engage the at least one side-branch member to extend the at least one side-branch member from within the main member through the opening.

Claims 34-41 (Canceled)

42. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member is treated for at least one of elution of drugs, biocompatibility, radioactivity, and radiopacity.

43. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member is kink resistant.

44. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member may be distended with at least one of minimal foreshortening and low recoil.

45. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member is circumferentially distensible.

46. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member comprises a graft material.

47. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member includes at least one of polytetrafluoroethylene, polyurethane, polyethylene, polyether sulfone, and polyester.

48. (Previously Presented) The system of claim 24, further comprising a flange connected to the at least one side-branch member and to the wall of the main member in the vicinity of the opening.

49. (Previously Presented) The system of claim 24, wherein at least one of the main member and the at least one side-branch member includes at least one of a film-tube, extruded tubing, braided tubing, and textile tubing.

50. (New) The system of claim 24, wherein the at least one side-branch member is integrally connected to the main member using a bonding process.